APPLICATION OF

TENASKA VIRGINIA PARTNERS, L.P. **CASE NO. PUE010039**

For approval of a certificate of public convenience and necessity pursuant to Virginia Code § 56-265.2, an exemption from Chapter 10 of Title 56, and interim approval to make financial commitments and undertake preliminary construction work

REPORT ON REMAND OF MICHAEL D. THOMAS, HEARING EXAMINER

April 3, 2002

HISTORY OF THE CASE

On January 16, 2001, Tenaska Virginia Partners, L.P. ("Tenaska") filed an Application with supporting testimony and exhibits requesting that the State Corporation Commission ("Commission") grant Tenaska a certificate of public convenience and necessity ("CPCN") pursuant to § 56-265.2 of the Code of Virginia (the "Code") to construct and operate a 900 MW natural gas-fired combined cycle power plant (the "Facility") in Fluvanna County, Virginia (the "County"). In addition, Tenaska sought an exemption from the provisions of Chapter 10 of Title 56 (§§ 56-232, *et seq*.), and interim approval to make financial expenditures and undertake preliminary construction work, pursuant to § 56-234.3 of the Code. With its Application, Tenaska submitted the prefiled direct testimony of Mr. Bill Braudt, general manager, project development for Tenaska, and Dr. Greg Kunkel, manager, environmental affairs for Tenaska. On April 20, 2001, Tenaska supplemented its Application by filing the information necessary to conduct an environmental assessment of the Facility. The Environmental Assessment was circulated to ten state agencies for review and comment. These agencies included the Virginia Departments of Environmental Quality ("DEQ"), Agriculture and Consumer Services, Conservation and Recreation, Forestry, Game and Inland Fisheries, Health, Historic Resources, Transportation and Mines, Minerals and Energy, as well as the Virginia Marine Resources Commission. The comments of those agencies were collected and summarized by the DEQ Office of Environmental Impact Review in its report to the Commission Staff dated June 27, 2001.

On May 4, 2001, the Commission entered an Order for Notice and Hearing requiring Tenaska to provide public notice of its Application, establishing a procedural schedule for the filing of testimony and exhibits, and scheduling an evidentiary hearing for July 24, 2001.

On July 24, 2001, the evidentiary hearing was convened as scheduled ("Initial Hearing"). Richard D. Gary, Esquire, and John M. Holloway, III, Esquire, appeared on behalf of Tenaska. C. Meade Browder, Jr., Esquire, and Kara Austin Hart, Esquire, appeared on behalf of the Commission's Divisions of Energy Regulation and Economics and Finance (the "Staff"). Columbia

Gas of Virginia, Inc. ("Columbia Gas") filed a notice of participation as a respondent on May 30, 2001. No other notices of participation were filed; thus, Columbia Gas joined Tenaska and the Staff as the only parties to the proceeding. Kodwo Ghartey-Tagoe, Esquire, appeared on behalf of Columbia Gas. At the commencement of the Initial Hearing, Columbia Gas presented a Stipulation to which the parties had agreed.

At the Initial Hearing, Tenaska presented the testimony of two witnesses, Mr. Braudt and Dr. Kunkel. Eight public witnesses testified at the hearing. The Staff presented the testimony of eight witnesses: Lawrence T. Oliver, assistant director of the Commission's Division of Economics and Finance; Jarilaos Stavrou, principal research analyst in the Commission's Division of Economics and Finance; Howard M. Spinner, senior utilities analyst in the Commission's Division of Economics and Finance; Tom Wilcox, environmental services biologist, Virginia Department of Game and Inland Fisheries ("DGIF"); John Kauffman, regional fisheries manager, DGIF; Joseph Hassell, environmental program manager, Office of Water Permits; Michael Murphy, division director for the Division of Environmental Enhancement, DEQ; and Charles Turner, director of the Office of Air Permit Programs, DEQ. Additionally, the Commission received non-party written comments from five individuals and from the Piedmont Environmental Council prior to the hearing. At the conclusion of the Initial Hearing, the parties were directed to file a joint issues statement identifying for the Commission the issues that needed to be addressed in this case. Tenaska and the Staff filed a joint issues statement, and also later filed post-hearing briefs.

On October 23, 2001, I entered my Report ("Initial Report"), summarizing the record and reviewing and analyzing the evidence and issues in this proceeding. In the Initial Report, I concluded that the Facility would have no material adverse effect upon the rates paid by customers of any regulated utility in the Commonwealth. I also discussed the issues surrounding Tenaska's proposal to burn fuel oil for no more than 720 hours per year, from October through March. I found that Tenaska had not articulated well its need to burn fuel oil as a backup fuel, and recommended that Tenaska's proposed use of fuel oil be prohibited in any CPCN that may be granted by the Commission. Concerning the Facility's impact on air quality, I indicated that Dr. Kunkel testified that Tenaska's air quality modeling techniques had been approved by the DEQ and the United States Environmental Protection Agency ("EPA"), and that the Facility's impact on air quality would be below applicable federal and state health standards. I also observed that DEQ's air quality witness supported Tenaska's case in stating that Tenaska's modeling showed the Facility's impact on air quality would be *de minimis*.

However, I also stated that I believed the DEQ's air quality analysis lacked discussion in two areas, which if included could provide a better assessment of the Facility's impact on air quality. The first area was the status of the existing air quality, not including the proposed Facility. The second area was the consideration of other pollution sources in the surrounding area, including other electric generating facilities. I recommended that the Commission direct its Staff to discuss with the DEQ, possible enhancements to the air quality analysis used for major stationary pollutant sources, and address them in the next application for an electric generating facility to come before the Commission.

With several conditions, I recommended that the Commission grant Tenaska interim approval, pursuant to § 56-234.3 of the Code, to make financial expenditures and undertake

preliminary construction work on the Facility. I also recommended that the Commission grant Tenaska preliminary approval, pursuant to § 56-265.2 of the Code, to construct the Facility, pending receipt and verification of all environmental or other permits necessary to operate the Facility. (Initial Report at 34).

Tenaska and Columbia Gas filed comments on the Initial Report, and the Staff submitted the comments of the DEQ. In addition, ten written comments or letters were filed by others, including the Chief Operating Officer of Monticello, the County Administrator on behalf of the Fluvanna County Board of Supervisors ("Board of Supervisors"), and Dynegy. In its comments, Tenaska objected to: the recommendations that the Commission prohibit the use of low-sulfur oil as a backup fuel; the concerns about Tenaska's use of a reservoir or other backup water source during drought conditions; the recommendation that certain conditions should be included in Tenaska's emergency management plan; and the recommendation that the Commission impose certain conditions relating to the possibility of clear-cutting trees in the buffer area surrounding the proposed site.

On January 16, 2002, the Commission issued an Order remanding the case for further proceedings as set forth therein. The Commission identified the following areas that require additional evidence to adequately develop the record:

(1) Rates - whether the proposed Facility will have an impact on the availability of service or rates charged by regulated public utilities other than electric companies, such as gas, water or sewer companies;

(2) Environment -
(a) what is the current level of air quality in Fluvanna County and surrounding counties; and
(b) what is the cumulative impact of the proposed Facility and other existing and proposed facilities on the air quality in Fluvanna County and surrounding counties;

(3) Economic Development - if there is deterioration in air quality in Fluvanna County and surrounding counties, will there be a corresponding negative impact upon economic development;

(4) The Public Interest -
(a) whether the proposed Facility's use of ultra low-sulfur fuel oil as a backup or alternative fuel for a period of not more than 720 hours during the months of October through March, and the resulting fuel oil delivery truck traffic and the Facility's emissions of nitrogen oxides ("NO_x"), sulfur dioxide ("SO_2"), and sulfuric acid mist, affect the public interest;
(b) whether conditions are needed with respect to backup or alternative sources of water to be used at times of drought and low flow in the James River, particularly regarding a reservoir to be constructed in Buckingham County and the corresponding impact of that reservoir on the environment; and

(c) whether the emergency management plan is adequate and Fluvanna County's emergency response personnel will be able to respond appropriately to an actual emergency at the proposed Facility if needed.

As to the tree buffer at the proposed site, the Commission found that Tenaska should be required to consult with and abide by the recommendations of DGIF and the Department of Forestry to develop and maintain a buffer. The Commission declined to impose additional conditions regarding the buffer.

On January 24, 2002, I issued a Hearing Examiner's Ruling setting a schedule and hearing date to address the remanded issues. On February 19, 2002, Tenaska filed its testimony and exhibits on the remanded issues, and on March 6, 2002, the Staff filed its testimony on the remanded issues. Columbia Gas submitted a letter on March 1, 2002, indicating that it did not plan to file any testimony or evidence on remand. On March 13, 2002, the evidentiary hearing on remand was convened as scheduled ("Remand Hearing"). Mr. Gary, Mr. Holloway and Kevin J. Finto, Esquire, appeared on behalf of Tenaska. William H. Chambliss, Esquire, appeared on behalf of the Staff, and Columbia Gas chose not to participate in the Remand Hearing. Ten public witnesses appeared at the Remand Hearing.

SUMMARY OF THE RECORD ON REMAND

In order to expedite this matter, counsel have agreed in lieu of briefs to submit a joint summary of the evidence, which is incorporated herein. I have reviewed this summary and find it accurately sets forth the facts necessary for the Commission to decide this case.

The evidence submitted by Tenaska, the Staff, the public witnesses, and those who submitted comments prior to the hearing of July 24, 2001, was summarized in the Initial Report. Below is a summary of the additional evidence submitted on remand by Tenaska and the Staff to address the six issues needing additional evidence identified by the Commission.

Public Witnesses

Ten public witnesses testified at the Remand Hearing. All but one supported the Facility.

Mr. Macon Sammons, the Fluvanna County Administrator and Chairman of the Fluvanna County Local Emergency Planning Committee, explained the process by which the County studied the impact of the Facility on Fluvanna County. He and two members of the Board of Supervisors had traveled to Seattle to tour a Tenaska power plant and meet with neighbors and local and state officials there. No problems or complaints about the plant were expressed to the delegation. Mr. Sammons and County officials met with DEQ representatives to discuss the air quality impact of the Facility. In addition, the County employed an outside contractor, Anderson & Associates Engineering, Inc. ("Anderson"), to study the effect of the Facility in areas such as air quality, noise, and traffic impact. Anderson's independent evaluation provided the basis for developing the Special Use Permit ("SUP"). Prior to approval by the Board of Supervisors, the Facility was evaluated and endorsed by other County bodies, including the Economic Development

Commission, the Chamber of Commerce, and the Planning Commission. County staff also conducted research on at least six other similar power plant projects elsewhere in Virginia. Mr. Sammons stated that the Dominion Virginia Power Bremo Bluff Power Station has been operating in Fluvanna County for 70 years. The County believes that its experience with other power plants, coupled with the actions taken to learn about and evaluate the Facility, has put the County in a strong position to manage its own affairs in regards to the Facility. (Tr. at 301-05).

Mr. Sammons also addressed some of the requirements of the SUP, including air quality, noise control, traffic, and water. Mr. Sammons characterized the requirements as "much tougher than any other local permit under which Tenaska has had to operate" and now a "model" for other Virginia jurisdictions. (Tr. at 304). Regarding air quality, Mr. Sammons noted that the County has the right under the SUP to monitor and review air quality and to review any remedial actions taken by the Facility in response to possible future violations. Mr. Sammons has reviewed the cumulative impact air quality analysis submitted by Tenaska, and notes that, given the insignificant impact on the environment, there should be no negative impact on the County's economic development. Second, Mr. Sammons indicated that under the SUP, off-site noise at the fenceline will be held below the 60 decibel level. Third, concerning road and traffic safety, Mr. Sammons stated that with only 30 employees and new limitations on fuel oil deliveries (a maximum of 4 trucks per hour and 48 trucks per day), there should be no significant effect on public roads. Mr. Sammons also noted that the SUP requires the Virginia Department of Transportation ("VDOT") to review Tenaska's construction traffic management plan. Finally, water withdrawals are regulated and completely restricted in times of exceedingly low flow, and the reservoir will help maintain electric generation in such low-flow periods. (Tr. at 305-08).

Mr. Sammons indicated that County public safety officials have been working with Tenaska officials for the development of a detailed plan for coordinated emergency response services. The joint planning process has addressed matters such as on-site training at the Facility, inspections and drills, and water storage for fire protection. The County Fire Department has experience with hazardous materials handling and has, when called on to do so, professionally and competently handled these situations. The County has also identified steps Tenaska can take to support the fire department and Tenaska has agreed to do so. (Tr. at 308-09). Upon questioning by the Hearing Examiner, Mr. Sammons stated that there will be annual on-site emergency drills at the Facility that will include an inspection of the Facility and personnel training. The County emergency management authorities and the local volunteer fire department will be invited to participate in the annual training exercises. (Tr. at 318-19).[1]

Mr. Sammons testified the County's population is growing rapidly and grew by 61% during the 1990s. Consequently, its capital requirements are considerable in order to construct needed facilities such as an elementary school, courthouse, and high school. Without substantial new private investment, the County will be unable to pay for all of its public service requirements. Mr. Sammons noted that the required new construction will result in $4.1 million annually in new debt service after the new high school is built in several years, and that cost (even excluding all other County debt) would consume approximately half of the County's entire present real estate tax income. Mr. Sammons also noted that it costs the County $3,000 annually to educate one child and

[1]During the hearing, Tenaska committed to conduct annual training exercises and to invite County emergency management authorities and the local volunteer fire department to participate. (Tr. at 320).

the average new home yields only $750 in real estate taxes. Mr. Sammons testified the County must have a diversified local economy and must have substantial new tax revenue. The approximately $1.5 million the County will receive from Tenaska each year will help the County

pay a major part of its costs. In this regard, Mr. Sammons noted that the Facility needs to get under construction by June of this year in order to be operational in time for the summer 2004 peak demand period, and for the County to realize full tax income from Tenaska in 2005. (Tr. at 309-12).

On cross-examination about water supply in the County, Mr. Sammons stated there have been some discussions about the possibility of obtaining water from East Coast Transport, Inc. ("ECTI") for the Fork Union Sanitary District. The Board of Supervisors is worried about the dry conditions so it is exploring options for a more reliable water source, and ECTI is one of several options. (Tr. at 314-16).

Mr. Cabell Lawton is the director of planning and development for the County. He addressed the zoning text amendment that was necessary to allow a power plant to be considered in the County. The amendment was subject to significant research, and it recognized that the location of a power plant is dependent on the appropriate confluence of utilities including high-voltage electric transmission lines and natural gas lines (in the case of natural-gas fired plants). The zoning text amendment also provides public protection, including a requirement that a power plant must be sited on at least 300 acres and that at least 87% of the site must be left as undeveloped space. There must also be perimeter screening and buffering to minimize visual impacts. The amendment includes design and site criteria, for example, to limit the height of structures and increase setbacks. (Tr. at 320-24).

Mr. Lawton testified the process of issuing the SUP included public hearings and intense review. The permit includes 34 conditions. The permit includes restrictions on lighting, which require exterior lighting to be directed downward and inward, and to have the ability to be switched off when not needed. The permit also requires increased buffers and setbacks for the Facility, and requires that the Facility be centrally located on the site. With the requirement that at least 87% of the site be undeveloped, Tenaska will place approximately 500 acres of its site into a permanently protected conservation program. To serve as a visual buffer, the permit requires a densely vegetated buffer consisting of nondeciduous trees, as well as the implementation of a forestry management plan to ensure a healthy stand of trees in the buffer area. The County included these requirements so that the Facility would fit in with the landscape to the greatest extent possible. (Tr. at 324-26).

Mr. Lawton then discussed the County Economic Development Report, which summarizes County development trends. The report indicates that 2001 was a record year for building permits, with the issuance of 433 new building permits. The County continues to experience a high construction rate in 2002. The County's comprehensive plan allows nonresidential uses in non-growth areas if they are well-buffered, their location is necessitated due to required infrastructure, and they do not significantly alter land use patterns. Mr. Lawton believes the Facility meets all of these requirements. The Facility will also help to reduce the County's reliance on property taxes as a revenue source. (Tr. at 328).

On cross-examination, Mr. Lawton stated that there was only one other potential site that had the necessary utility infrastructure for an electric generating facility; the Competitive Power Ventures plant has been proposed for that site. One other location had the necessary utilities, but

the location was in an area developed for residential use and was not workable for the Facility. (Tr. at 329-31).

Mr. Francis Seay is a long-term resident of the County who testified, in his words, on behalf of the "long-term residents of Fluvanna County who have an interest in keeping their property taxes within reasonable bounds by, hopefully, bringing in industry." (Tr. at 334). Mr. Seay addressed the economic situation in the County and noted that the growth between 1990 and 2000 exceeded the whole population of the County for a period of around 40 years. To show the economic need of the County, Mr. Seay testified that although the retail sales per capita for the year 2000 for Virginia was $9,293, for the County it was only $1,377. Mr. Seay testified the County does not have the general infrastructure that many other counties have. Mr. Seay noted that the County Chamber of Commerce has been attempting to attract industry for 50 years and is still trying to attract industry. (Tr. at 334-37). During cross-examination of Mr. Seay, it was volunteered by Mr. Sammons that the property tax rate in Fluvanna County is presently 71¢ per hundred, but will be reduced to 65¢ following reassessments. (Tr. at 337).

Mr. Jay Sherrill is a resident of the County's Fork Union area and testified as chairman of the County Economic Development Commission, as a member of the Chamber of Commerce, and as a County resident. Mr. Sherrill noted that the Economic Development Commission passed a resolution supporting the Facility and endorsed the project. The Chamber of Commerce Board of Directors unanimously supported the Facility. Mr. Sherrill believes the welfare of the County is at risk if it does not take advantage of economic opportunities such as the Facility. In Mr. Sherrill's opinion, the Facility will not pose a threat to the County's quality of life. (Tr. at 338-41).

Mr. Dan Holmes appeared on behalf of the Piedmont Environmental Council ("PEC"). Mr. Holmes stated that there is no existing baseline data to determine how the Facility and all other facilities surrounding the County will impact the region. He stated that the ozone monitor in Fluvanna run by the Department of Environmental Services at the University of Virginia ("UVA") indicated that, when running the numbers for the two plants proposed for the County, the two facilities together could raise the ambient ozone levels to that which would threaten the public health. He believed the cumulative impact analysis presented by Tenaska failed to consider the topography of the County, climatic inversions, and the Facility's effect on residents closest to the plant. Mr. Holmes stated that any "numbers run by the DEQ" cannot be considered a cumulative impact review because the DEQ's formal development of the cumulative review process is ongoing. Mr. Holmes cited letters from DEQ to two state legislators to this effect. (Tr. at 343-44).

Mr. Holmes testified Tenaska's two facilities will represent roughly 16 million gallons of water withdrawal a day from the James River. He stated that total water withdrawals from the James from all the power plants proposed since deregulation was first announced, amount to roughly 80 to 100 million gallons per day. Mr. Holmes noted that Virginia is experiencing a severe drought and is already 60% to 70% below normal precipitation levels for 2002. Mr. Holmes cited a letter dated October 25, 2001, to the Army Corps of Engineers from Ronald Hamm, then Secretary of Natural Resources, which argued the need for a comprehensive review of the James River Basin as a water resource and stated that immediate actions are needed to meet water supply needs in this basin. (Exhibit 12). Mr. Holmes stated that the financial needs of the County should not override

the risks to public health and the environment. The PEC asks that the Commission deny the CPCN. (Tr. at 344-46).

On cross-examination, Mr. Holmes stated that to make the Facility acceptable to the PEC, it would have to be completely redesigned and incorporate stricter technology to take into account limited water resources. Mr. Holmes stated that although the Facility had been deemed acceptable by numerous state agencies tasked with evaluating it, without complete and thorough cooperation among those agencies he failed to see how there could be a comprehensive review of the Facility. Mr. Holmes recognized that the October 25, 2001, letter from Mr. Hamm, referenced above, calls for no particular remedial actions. Mr. Holmes did not know if the Corps responded to the letter. Mr. Holmes further stated on cross-examination that he did not review the cumulative impact report submitted by Tenaska, and that some of his concerns were word-of-mouth from the UVA professor that runs the ozone monitor referenced earlier in Mr. Holmes' testimony. (Tr. at 346-57). Mr. Holmes acknowledged the PEC participated in the air permit proceeding of the Facility before DEQ, but he was unaware of the nature of PEC's comments in that proceeding. (Tr. at 353).[2]

Mr. James Perkins is a native of the County and a member of the Economic Development Commission. Mr. Perkins testified Fluvanna County has been the second fastest growing county in Virginia for the past few years, which has strained the school system. Historically, the County has had a good school system largely because of the taxes collected from the railroad and the power plant at Bremo Bluff. Mr. Perkins testified the railroad facility has closed and taxes on the Bremo Bluff plant have been going down; the County received under $587,000 in 2001 from the Bremo Bluff plant. The County needs more tax base and resulting tax revenue to keep up with the fast-growing school system and to finance the planned school projects. The Facility will help with raising revenue for the County. (Tr. at 358-60).

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[2]I was disappointed with the quality of PEC's comments in this proceeding. If it truly intends to make a positive difference on the environment, then PEC needs to backup its comments with hard evidence, not hearsay testimony. The word-of-mouth comments about excessive ozone levels in Fluvanna County made by a professor at UVA who happens to run some monitoring station in the County are hearsay. If the PEC witness had remained in the courtroom, he would have heard Dr. Kunkel testify that Tenaska also heard about this professor's research from the U.S. Forest Service and attempted to get access to his data as part of its air quality analysis, but was unsuccessful. (Tr. at 494-95). If the data, and its findings, were so important to PEC, it should have submitted the data into the record as evidence, or even better, provided the data to Tenaska so that it could have considered it as part of its cumulative impact air quality modeling for this case.

Particularly disappointing was the fact that PEC had not even reviewed Tenaska's Cumulative Impacts Analysis before offering its comments. If it had, it would have seen that the analysis considered both local topography and the worst-case meteorology.

The PEC's concerns about cumulative water withdrawals from the James River, while passionately made, provided little substance to my decision-making analysis. Again, the record evidence indicates that ECTI's withdrawals from the James River represent 0.45% of the average flow of the river at the intake location, the effect of cumulative withdrawals from the river was considered in the water withdrawal permitting process, the withdrawals are consistent with the instream flow requirements of the James River Regional Flow Management Plan for the Falls of James Area, and the withdrawals could be curtailed or ceased during periods of low flow in the river. Although the river is currently experiencing low-flow conditions, recent rainfall west of Richmond has yet to make its way downriver. With the unpredictability of weather, no one knows with any degree of certainty what the James River's stream flow will be like in 2004, when the Facility commences operation. However, it appears from the record that sufficient safeguards are in place to address low-flow conditions in the river, and the proposed Facility's ability to withdraw water during such conditions.

Ms. Patricia Eager resides in the County and is Chairman of the Planning Commission. The Planning Commission first held public hearings on the proposed Facility on October 30, 2000. The zoning text amendment to allow power plants to be located in agriculturally zoned areas requires that plants be sited on a minimum of 300 acres and allows the plant's footprint to use no more than 13% of the site. Tenaska will use approximately 50 of the 569 acres comprising the Facility site. The Planning Commission gave careful consideration to Tenaska's SUP request, and also hired an independent consultant to assist in the analysis of the application. The Planning Commission recommended approval of the SUP by a vote of 9 to 1. Speaking as a resident, Ms. Eager stated that the Facility will be good for the County. (Tr. at 362-64).

Mr. Jerome Booker resides in the Fork Union area of the County and previously served on the Board of Supervisors. Mr. Booker noted that the County has not recently had sufficient development to generate the revenue it needs, and the Tenaska Facility will assist in raising funds for the County. In considering the County's emergency response capabilities, Mr. Booker stated that when he was on the Board of Supervisors, he observed that the fire department conducted drills with one of the industrial concerns in the County in order to be prepared for emergencies. The fire department is also well-equipped with recently purchased fire vehicles and associated apparatus. Regarding traffic on the roads around the Facility, Mr. Booker testified he owns and operates dump trucks for a living and that he is familiar with the roads in the area of the plant. (Tr. at 370). The road surrounding the Facility (Route 761) has handled heavy truck traffic associated with a construction project as recently as a year ago, and there has been no deterioration of the road and very few or no complaints from those living in the vicinity. (Tr. at 367-71).

Mr. Minor Eager lives in Troy in the County and is a member of the Economic Development Commission. He noted that if the Facility site were to be developed into a housing development instead, it would support about 250 private homes. The 250 homes would generate pollution from traffic and appliances such as lawn mowers and chain saws, which might be greater than the Facility and would leave no open space in the area. Mr. Eager testified the permanent jobs that will be provided by the Facility will enhance the County job market, and the temporary construction jobs will also temporarily help the local stores, restaurants, and labor market. (Tr. at 372-75).

Mr. William ("Ray") Kidd lives in Scottsville about two miles from the Facility site and is a member of the Planning Commission. He was chairman of the Planning Commission when the SUP was approved. Mr. Kidd addressed the comprehensive economic development plan developed by the County. One of the goals stressed in the plan was to seek non-polluting industry. Mr. Kidd traveled to several power plants in an effort to get an idea of how much noise and light pollution power plants cause, and whether such plants disturb the local residents or cause any other problems in their locales. Mr. Kidd visited plants in Gordonsville and Remington, Virginia, as well as a Tenaska plant in Franklin, Georgia that was under construction. None of the construction at that site was visible until Mr. Kidd drove down the plant's actual driveway. (Tr. at 376-79).

Mr. Kidd visited a Dynegy plant in Hartwell, Georgia and when parked a few hundred yards from the plant could hear a sound similar to a refrigerator running. When parked somewhat further away, he could hear no noise at all from that plant. Mr. Kidd concluded from his visits that power plants can be built without alarming the community, and that residents might not even realize a power plant is nearby unless they see the construction. (Tr. at 376-82).

On cross-examination, Mr. Kidd stated that he did not get the impression that any of the power plants he visited had hurt any of the local businesses. He did notice that there was a new subdivision being built near one of the plants and he assumed, if being a neighbor to a gas plant were bad, new homes would not have been built in the area. (Tr. at 384).

Testimony and Evidence of Tenaska

In its February 19, 2002, submittal on remand, Tenaska presented the prefiled direct testimony of three witnesses: Mr. T. R. Ownby, manager, project development for Tenaska; Mr. Christopher L. Ellsworth, account manager and head of the Fuels Forecasting and Market Analysis practice at Pace Global Energy Services; and Dr. Greg Kunkel, manager, environmental affairs for Tenaska.

(a) Ownby Testimony.

In his prefiled direct testimony, Mr. Ownby summarized the development process for the Facility, and updated the status of the project since the record was closed in July 2001.[3] Subsequent to that time, Tenaska signed a long-term energy tolling contract under which all of the Facility's electrical output is committed to a party that he characterized as a highly respected energy marketing company. The construction start date is currently scheduled for the second quarter of 2002, and consistent with this, the confidential tolling arrangement contemplates a June 2004 commercial operation date. Tenaska has invested approximately $8 million in developing the Facility in reliance on the Commonwealth's established processes for obtaining approval; these costs are "sunk" in the Facility. Unlike several other planned power projects in Virginia that have been postponed or cancelled, Tenaska's execution of a tolling agreement and the issuance of the major air and water permits, shows that Tenaska is ready and anxious to move ahead with construction of the Facility. (Ownby Remand Testimony at 5-7).

Regarding Tenaska's proposal to use ultra low-sulfur fuel oil at the Facility, Mr. Ownby testified Tenaska's customer for the Facility's output places a high premium on reliable operations; it is critical to them to be able to run during times of highest need. Thus, the customer is willing to pay the $5 million needed to install the infrastructure for fuel oil to ensure this reliability. (Tr. at 416-17). The Prevention of Significant Deterioration ("PSD") permit issued by DEQ permits the Facility to store on-site up to approximately 3.6 million gallons of ultra low-sulfur fuel oil, supporting approximately 83 hours of operation at full dispatch. The Facility can use fuel oil for backup generation no more than 720 hours between October and March, and may not use fuel oil at all from April through September. The on-site storage tanks will be filled via tanker trucks. Although the fuel offloading facilities at the site can accommodate a maximum of six tanker trucks per hour, Tenaska's customer has agreed to limit fuel oil deliveries to no more than four trucks an hour, and no more than 48 trucks on a daily basis. (Ownby Remand Testimony at 8-9). Mr. Ownby further committed that there will be no waiting tanker trucks lined up on the roads adjacent to the Facility prior to unloading their fuel oil. (Tr. at 418-19).

Mr. Ownby further testified the Board of Supervisors and the Planning Commission reviewed potential truck traffic prior to granting land use approval for the Facility. The Planning

[3]Mr. Ownby's Remand Testimony was marked Exhibit 13 (hereafter "Ownby Remand Testimony").

Commission established that the vehicular traffic on the roads leading to the Facility is modest and concluded that the tanker traffic will not significantly impact the County. Additionally, the roads around the Facility routinely handle logging truck traffic; Route 761 is designed to accommodate heavy truck traffic and was recently upgraded; and during normal years a much lower number of trucks will be used to refill the backup supply of ultra low-sulfur fuel oil. On cross-examination, Mr. Ownby stated that this fuel is not now readily commercially available, but that suppliers have assured him that it will be by the start of commercial operations of the generating plant. (Tr. at 411-12). Mr. Ownby testified that, although it is unlikely the Facility ever will need to burn fuel oil for 720 hours, to achieve the required balance between capital expenditures and reliability, the ability to burn fuel oil for a maximum of 720 hours is critical. (Tr. at 407). He used the analogy that, even though he probably won't ever have a flat tire, he wouldn't carry half a spare tire in his trunk. He also admitted that he doesn't carry more than one spare either. (*Id*.). Finally, he testified Tenaska will work with VDOT to ensure that the roads around the Facility can accommodate both construction traffic and fuel oil deliveries. (Ownby Remand Testimony at 9-11).

On cross-examination, Mr. Ownby indicated he was familiar with the amendment to Virginia Code § 56-265.2, which permitted the Commission to grant certificates to "merchant" plants. He agreed that FERC Orders 888 and 2000 will ensure Tenaska's access to the transmission grid. (Tr. at 406-07). Mr. Ownby believed there were some remaining permits yet to be acquired by Tenaska, but deferred specific questions on this topic to Dr. Kunkel. (Tr. at 408). Mr. Ownby was uncertain whether all permits needed for the construction of the planned reservoir in Buckingham County had been issued, but agreed that it was the intent of Tenaska to have that facility ready concurrent with the start of generation operations at the Fluvanna County plant. (Tr. at 408-09).

Mr. Ownby lastly addressed the need for prompt Commission certification of the Facility, noting that with the exception of the CPCN, the Facility had received all the primary regulatory approvals necessary to meet a June 2004 commercial operation date, as contemplated by the tolling agreement. Mr. Ownby noted that certification of the Facility will serve the Commonwealth's goal of continuing the development of a competitive wholesale electric market, and will meet a significant need for the Facility and other new generating capacity in Virginia. Many potential projects recently have announced delays or cancellation, and the North American Electricity Reliability Council's forecast for the Virginia-Carolinas ("VACAR") subregion projects only a 11-14% reserve margin between 2001-2010, which is barely adequate and assumes the construction of 14,289 megawatts of new capacity in that time frame. (Ownby Remand Testimony at 11-14). In short, Virginia will need increasing amounts of electric power, and the Facility is well-positioned to provide clean, reliable electricity in time for peak summer season 2004.

(b) Ellsworth Testimony.

In his prefiled remand direct and rebuttal testimonies, Mr. Ellsworth addressed the expectations for consumption of fuel oil by the Facility; the availability and reliability of gas pipeline transportation capacity in Virginia in view of projections of natural gas consumption from new power generation; the availability of natural gas supply on a national and regional level; and

the effects that the Facility and surrounding Virginia natural gas-fired power projects will have on the price of natural gas to other consumers in Virginia.[4]

Mr. Ellsworth first discussed the gas supply arrangement for the Facility, indicating that the Facility will receive natural gas through interconnects with mainlines owned and operated by Transcontinental Gas Pipe Line Corporation ("Transco"), which run through the Facility site. The Facility will consume up to 170 MMcf/d (million cubic feet per day) of natural gas on peak usage days. (Ellsworth Remand Direct Testimony at 7). Average day consumption would most likely be about 60% of that amount. (Tr. at 430).

Regarding the use of fuel oil, Mr. Ellsworth stated that it is common for gas-fired power plants to have backup fuel oil capability, and that most gas-fired plants in Virginia have Commission-approved backup fuel oil capability. (Ellsworth Remand Direct Testimony at Exhibit CLE-4). Such capability is installed for two reasons: (1) to enhance power system reliability by ensuring that the plant will operate when gas supplies are interrupted by *force majeure* events, and (2) to provide for economic dispatch in the unusual event that gas prices remain higher than fuel oil prices for more than a few days. Regional peak and average annual electricity demand is expected to increase, placing additional demands on power resources and reducing system reserve margins until new capacity is built. During peak winter demand periods, the enhanced reliability provided by fuel oil backup capability will be important to maintaining power supply in the case of gas interruptions. (Ellsworth Remand Direct Testimony at 8-10). Mr. Ellsworth was unaware of any *force majeure* events that had caused disruption of firm gas supplies in Virginia, however. (Tr. at 425).

Mr. Ellsworth testified that, as to the actual use of fuel oil for economic reasons, historic natural gas prices at Transco Zone 5 and low-sulfur diesel at Norfolk, Virginia, between 1995 and 1999 show that it would have been economic to switch to fuel oil less than two days per year on average. (Ellsworth Remand Direct Testimony at Exhibit CLE-5). During 2000 and 2001 backup fuel oil was consumed in greater quantities due to the unprecedented cost levels of natural gas prices during the 2000-01 heating season, thus making it economic to burn fuel oil approximately 107 out of 730 days. Mr. Ellsworth testified such a high price level for gas is "very unusual" and would occur infrequently in the future. (Tr. at 427). However, even in such unusual supply or price conditions, the Facility's use of fuel oil would be capped at thirty days. (Ellsworth Remand Direct Testimony at 10-12). Mr. Ellsworth noted that if gas-fired plants can switch to alternative fuels, gas demand is shaved, thus helping to deflate high gas prices and restore the usual pricing relationship between natural gas and fuel oil. (*Id*. at 4). Mr. Ellsworth also believed the price for ultra low-sulfur fuel oil would be greater than the price of the No. 2 fuel oil used in Exhibit CLE-6, his economic comparison of the two fuels. (Tr. at 428).

On average, gas-fired facilities in Virginia consumed 3.17 million gallons of fuel oil per year from 1995 to 2001. In the winter of 2001, fuel oil consumption averaged 5.89 million gallons per plant because of the unusual price spike. (Ellsworth Remand Direct Testimony at Exhibit CLE-6). The Facility's permitted storage of 3.6 million gallons of ultra low-sulfur fuel oil will provide an adequate supply for approximately three days if the plant operates at 100% load factor.

[4]Mr. Ellsworth's Remand Direct Testimony was marked Exhibit 14 (hereafter "Ellsworth Remand Direct Testimony") and his Remand Rebuttal Testimony was marked Exhibit 15 (hereafter "Ellsworth Remand Rebuttal Testimony").

Comparing the Facility's fuel oil storage capabilities to the average plant consumption for 2001, the Facility would have gone through two storage tanks of fuel oil over the course of the entire winter. Assuming the Facility began the winter with a full storage tank, this would require only one refill. (Ellsworth Remand Direct Testimony at 12).

As to the growth of the natural gas market and transportation infrastructure, Mr. Ellsworth testified Virginia has direct access to multiple major natural gas supply basins accounting for nearly 55% of U.S. gas supplies, ensuring access to competitively priced and liquid gas supply. Virginia gas consumption represents only 15% of the Southeast gas market and less than 1% of the U.S. market. Historically Virginia has had one of the smallest gas-fired power generation loads of any U.S. region. As the electric industry restructures and environmental requirements make natural gas a more desirable fuel, Pace Global projects Southeast gas-fired power generation demand to increase from a daily average of 1.2 Bcf/d (billion cubic feet per day) in 2000, to 2.3 Bcf/d in 2005, and to 3.1 Bcf/d by 2010. (*Id.* at 12-14; Exhibit CLE-7).

Because the southeastern states have abundant pipeline capacity exceeding regional consumption, the gas transportation infrastructure of Virginia and the Southeast is sufficient to satisfy expected demand growth. Mr. Ellsworth projects additional transportation capacity to be added by 2005 and provided a list of proposed transportation infrastructure expansions in the Southeast. (Ellsworth Remand Direct Testimony at Exhibit CLE-8). The proposed capacity additions and upgrades would lead to increased options for fuel procurement and lower utilization rates on existing pipelines in Virginia. In Mr. Ellsworth's opinion, the existing pipeline infrastructure in Virginia is sufficient to accommodate an additional two or three generation plants, but capacity expansions would need to be made if more than that are to be built. (Tr. at 433-34). He was uncertain of the capacity utilization on the Transco pipelines serving Virginia, but testified the Transco system operates at 83% of capacity nationwide. (Tr. at 432).

Mr. Ellsworth testified that historically Transco has been highly responsive to shipper requests for additional transportation capacity and has held "open seasons" for Virginia users to express their needs for additional pipeline capacity. (Ellsworth Remand Rebuttal Testimony at 2). In response to capacity needs, Transco has added annually on average 260 MMcf/d since 1996 or about 1.5 Bcf/d in new capacity since 1996. (*Id.*). He believes the rate of capacity expansion would need to increase to accommodate new electric generation construction reasonably likely to be built. (Tr. at 434). Due to the seasonal nature of the Southeast's consumption, it provides a robust secondary capacity release market. Typically, capacity trades at significantly below maximum tariff, trading at 69% of maximum tariff during the summer and 98% during the winter. (Ellsworth Remand Direct Testimony at 14-16).

Mr. Ellsworth testified despite growth in consumption in the Northeast and Mid-Atlantic regions, capacity utilization on gas pipelines running through the Southeast would not increase. The Northeast obtains natural gas supplies through major pipelines other than Transco, and numerous new pipelines have been proposed to bring additional Canadian supplies to the Northeast and Mid-Atlantic regions. (*Id.* at 16).

As for gas supply, Mr. Ellsworth testified the long-term outlook for North American gas supplies is positive, with some analysts estimating a North American resource base of over 2,000

Tcf (trillion cubic feet). Pace Global believes North American gas resources can support long-term U.S. gas consumption that could grow to 32 Tcf by 2015, from 22 Tcf presently. New gas resources are being added as producers gain more knowledge about gas bearing regions. Proven gas reserves also show that producers generally replace reserves that are produced and sold into the market. (*Id.* at 18).

Finally, as to the impact of the Facility on natural gas prices, Mr. Ellsworth testified the Facility's gas consumption is insufficient to materially impact national natural gas prices, and it is unlikely the Facility will affect the delivered basis in Virginia. Further, the Facility together with other facilities with fuel oil backup capability could serve to reduce price volatility, and will not exacerbate gas price volatility. The Facility is a small part of a sizable and interconnected North American natural gas market, and will have no effect on retail gas prices. (*Id.* at 19-20). Likewise, the Facility will be contracting for available capacity on existing gas transportation lines, or paying for upgrades necessary to provide for incremental firm service. The Facility will not adversely impact gas supply reliability in Virginia. (*Id.* at 17-19).

In sum, Mr. Ellsworth concluded the Facility will likely not consume large amounts of fuel oil. Natural gas is cheaper than fuel oil, Transco's reliability is high, and Transco customers generally suffer few interruptions. (Tr. at 425-26). Even so, maintaining backup fuel oil capability is prudent to allow the Facility to dispatch during natural gas interruptions. Gas pipeline availability will increase to meet load, and the portion of firm capacity that the Facility may procure should not jeopardize the volume of firm capacity held by other shippers. Concerning natural gas supply, the U.S. has plentiful natural gas resources to meet future consumption requirements, and there is a diverse portfolio of gas supply available to Virginia. Finally, the Facility and surrounding facilities represent a small portion of aggregate national demand, and will not have the market power to unduly influence prices. Likewise, the Facility will not impact long-term gas prices. (Ellsworth Remand Direct Testimony at 3-6).

(c) Kunkel Testimony.

In his prefiled direct testimony, Dr. Kunkel addressed the status of required permits, as well as four of the issues remanded to the Hearing Examiner: air quality and economic impact, use of fuel oil, the proposed reservoir, and emergency management planning.[5] Dr. Kunkel stated the CPCN is the only major approval still to be obtained before Tenaska can begin construction of the Facility. The DEQ issued a final PSD permit on January 11, 2002. (Kunkel Remand Testimony at Exhibit 3, Appendix D). On December 27, 2001, DEQ issued a Virginia Water Protection ("VWP") permit to East Coast Transport, Inc. ("ECTI"), the affiliate of Tenaska that will supply non-potable water to the Facility. That permit was amended by DEQ on February 8, 2002. (*Id.* at Exhibit 1). A draft Virginia Pollutant Discharge Elimination System ("VPDES") permit was made available by DEQ for public review, with expected State Water Control Board ("SWCB") action scheduled for March 2002. (Kunkel Remand Testimony at 4; Exhibit 2). Tenaska will need to obtain this discharge permit prior to operating the plant as designed and intended. "Zero-discharge" operation is possible, but would require engineering modifications. (Tr. at 581-82). Dr. Kunkel explained that converting to a "zero discharge" operation raises reliability concerns because of the additional water treatment equipment required and the associated risk of equipment failure causing the entire

[5]Dr. Kunkel's Remand Direct Testimony was marked Exhibit 16 (hereafter "Kunkel Remand Testimony").

plant to go down. (Tr. at 566). Further, a "zero discharge" operation would result in a complete consumptive use of the water withdrawn from the river without the beneficial return flow to the river. As Dr. Kunkel testified, the proposed discharge from the Facility will provide return flow to the Rivanna River, which needs base flow and to the James River where this return flow will be beneficial during low-flow periods. (Tr. at 567).

The EPA has filed an unspecified objection to the issuance of the VPDES permit for the Facility. (Tr. at 513, 515). Dr. Kunkel expressed his belief that EPA's objection to the VPDES permit is based on EPA's issuance of a new rule under § 316(b) of the Clean Water Act setting standards to ensure that water intake structures are designed to minimize impingement and entrapment of aquatic life. (Tr. at 516). Although ECTI will own and operate the water intake for water withdrawals for the Facility, Dr. Kunkel believes EPA is attempting, through discharge permits, to ensure that intakes for power plants meet the new design standards, even where the water intake is actually controlled by another entity, as in this case. Dr. Kunkel testified ECTI's water intake design "far exceeds [EPA's] standard in its design characteristics" and ECTI's intake design "more than complies" with EPA's new standard. (Tr. at 517-18). Finally, the process of obtaining approval by the County of the detailed facility site plan required under the terms of the SUP currently is underway. (Tr. at 454).

At the hearing, Dr. Kunkel first briefly summarized his prefiled remand testimony. With regard to the Facility's impacts on public utilities, Dr. Kunkel testified that Tenaska concluded that there were no water or sewer companies that would be directly affected by the proposed Facility. (Tr. at 445). Regarding air quality, Dr. Kunkel stated that the air quality in Fluvanna County and the surrounding counties is good and the impact of the proposed Facility would be insignificant. Additionally, Dr. Kunkel testified that cumulative analyses conducted for the Facility indicated that the combined impact of the proposed Facility and other existing and proposed facilities on the air quality in Fluvanna County and surrounding counties would be below allowable levels. (Tr. at 447). Further, because there would be no material cumulative air quality impacts on Fluvanna County or the surrounding areas, there would be no adverse effect on economic development. (Tr. at 448).

Additionally, Dr. Kunkel testified the use of ultra low-sulfur fuel oil at the Facility does not increase the Facility's impact on air quality in Fluvanna County or the surrounding counties. (Tr. at 449-450).

Regarding the proposed reservoir, Dr. Kunkel testified Tenaska has sited the reservoir such that the effects on waters of the United States and wetlands are minimized and subject to restrictions imposed by Buckingham County and the U.S. Army Corps of Engineers. (Tr. at 450-451).

Dr. Kunkel testified Tenaska has begun working with County officials and local emergency planning officials to develop an integrated contingency plan for the Facility. Dr. Kunkel concluded the Facility is being designed to address emergency issues that can be anticipated, and there will be procedures in place to ensure adequate emergency response. (Tr. at 452).

With respect to the potential adverse impact on public water supply utilities near the Facility, Dr. Kunkel testified there are no public water supply utilities in Fluvanna or Buckingham

counties that withdraw water from the James River, the water source serving the Facility, so the Facility can have no possible impact on the availability or rates of local public water utilities. (Tr. at 445-46). In fact, the Buckingham County Board of Supervisors has authorized a contract with ECTI for the provision of raw water to Buckingham County's water supply system. Thus, Buckingham County benefits by being able to share in the water supply facilities, procuring raw water service at a fraction of the cost it would otherwise pay to build its own facilities. Further, the Fluvanna County Board of Supervisors has directed its staff to explore options for a more reliable water source for the Fork Union Sanitary District. Using raw water provided by ECTI is among the options being studied. (Tr. at 315-16). There is no sewer service associated with the Facility, and thus the Facility will have no effect on such service in the Fluvanna County area. (Kunkel Remand Testimony at 4-6).

Regarding the current quality of air in Fluvanna County, Dr. Kunkel testified based on a detailed review of monitoring data obtained by DEQ, the ambient air quality in Fluvanna County and surrounding counties is good, and in attainment with all the National Ambient Air Quality Standards ("NAAQS"). Dr. Kunkel testified Tenaska retained Trinity Consultants to review data from EPA-approved air monitoring stations in Virginia. (Tr. at 457). The locations of these monitors are shown in Appendix H to Exhibit 3 of the Kunkel Remand Testimony. Not all monitoring stations measure concentrations of all criteria pollutants. Trinity identified stations that are most representative of conditions in Fluvanna County, those closest to Fluvanna that are in a rural setting. Dr. Kunkel also noted that DEQ and EPA had located the monitors in a network where there are "issues to look at." Therefore, there are relatively fewer monitoring stations in rural than in urban areas. Therefore, for some of the criteria pollutants, Trinity was forced to select stations in more urbanized areas than Fluvanna County. This is a conservative approach, since the urban stations would likely show higher concentrations of pollutants than a rural station. (Tr. at 457-59).

The DEQ air quality monitoring stations closest to the Facility have recorded no violations of any NAAQS over the last five years. (Kunkel Remand Testimony at 6-7). Worst-case air quality data from the representative stations are summarized in the "Cumulative Impacts Analysis - Tenaska Virginia Generation Station (the "Trinity Report")." (*Id.* at Exhibit 3, Table 2-6).

Dr. Kunkel next addressed the cumulative impact of the Facility and other existing and proposed generating facilities on the air quality in Fluvanna and surrounding counties and the model used by Trinity to develop the cumulative impacts analysis. (Kunkel Remand Testimony at Exhibit 3).

Tenaska met with Staff and DEQ to discuss a reasonable approach to cumulative impacts modeling. While there is no DEQ or EPA-approved method of assessing cumulative air impacts from proposed and existing air pollution sources, Tenaska, DEQ and Staff found that it is reasonable to define the "cumulative impact" on air quality of a given project as the effect of the incremental impact of the project when added to background air quality (inherently including the effects of all existing emission sources) and the air quality impacts of reasonably foreseeable future projects. (Tr. at 460-62).[6] Tenaska thus analyzed whether the air quality impacts of the proposed

[6]This definition is based on the regulatory definition of "cumulative impacts" of the President's Council on Environmental Quality. (Kunkel Remand Testimony at 8).

Facility, when added to the background air quality and the modeled air quality impacts of reasonably foreseeable future electric generation projects, would cause or contribute to some impact on public health and the environment, such as a potential violation of the NAAQS. (Kunkel Remand Testimony at 7-8). Staff, DEQ and Tenaska agreed this cumulative impact analysis, while not the only available method, was a reasonable approach to answering the questions posed in the Commission's Order, and was designed to generate results that conservatively predict future air quality (*i.e.*, overestimate ground level concentrations of pollutants from existing and proposed sources). (Tr. at 498-499). The technical aspects of the analysis represent scientifically sound methodologies to predict ground-level concentrations of criteria pollutants. (Kunkel Remand Testimony at 11).

To account for impacts from existing sources, Trinity used the highest readings from representative DEQ monitoring stations surrounding Fluvanna County identified in Table 2-6 of the Trinity Report. (*Id*. at Exhibit 3). Air quality monitoring data inherently reflect the impacts of existing sources. (Kunkel Remand Testimony at 11). To account for the potential air quality impacts in Fluvanna and surrounding counties from the Facility, and 22 other proposed electric generation facilities for which air permit applications had been submitted to the DEQ through January 25, 2002, Trinity used the following methodology:

> (1) Trinity gathered the DEQ permit file information on the proposed generating stations and performed the modeling for NO_x, SO_2, carbon monoxide ("CO") and particulate matter ("PM").
>
> (2) Emissions were modeled at the maximum levels requested in DEQ air permit applications, or the maximum levels authorized by DEQ for those facilities that have been issued air permits.
>
> (3) The modeling used EPA's latest approved Industrial Source Complex ("ISC") software and followed all EPA and DEQ protocols. The ISC model takes into account topography and meteorology to predict worst-case ground-level concentration. (Tr. at 459-63, 481-83).

Regarding the results of the cumulative impacts modeling described above, Dr. Kunkel's testimony referred to the bar charts at the end of the Introduction to the Trinity Report. (*See*, Kunkel Remand Testimony at Exhibit 3). These are very helpful in understanding the relevant modeling results and appropriate benchmark against which to evaluate those results. These charts make three comparisons. First, Dr. Kunkel stated that for all criteria air pollutants, except ozone, the incremental impacts of the Facility are compared to the single-source modeling significance levels ("MSLs") established under the PSD program. There is no MSL for ozone. Incremental impacts below the single source MSLs are deemed not potentially significant. (Tr. at 463-64). The highest pollutant concentrations attributable to the Facility are all below the relevant single-source MSLs (both shown in green on the charts) and are thus insignificant impacts. (*Id*.).

Second, the modeled combined effects of all proposed generation facilities are compared to the allowable PSD Increments (shown in blue) which serve as an appropriate benchmark against which to measure the impacts from multiple sources. (Tr. at 470).[7] The combined impacts of all 23

[7]There is no PSD increment for CO or ozone.

existing or proposed facilities are below the allowable PSD increments (both shown in blue on the charts) in all cases, and, in most cases, are below the single source MSLs. (*Id.*).

Third, Tenaska modeled all 23 of the existing or proposed generation facilities, even though they may not all be built. The maximum combined impact of all 23 facilities added to the worst-case background air quality was then compared to the NAAQS (shown in red), which were promulgated by the EPA to protect human health and public welfare. (Tr. at 471-72). Adding the predicted impacts of all the proposed facilities to the worst-case background air quality yields the "cumulative impacts" of the Facility and the 22 other existing or proposed facilities. These results demonstrate that the 23 facilities will not significantly degrade existing air quality and will not cause or contribute to a violation of any NAAQS. The worst-case cumulative impacts values and the NAAQS are both shown in red on the charts. (Tr. at 463-72).

Dr. Kunkel's testimony also addressed cumulative impacts from the 23 existing or proposed facilities on ozone concentrations. Due to the complexity of ozone modeling, Trinity incorporated the results of ongoing ozone modeling performed by the DEQ for 16 existing or proposed facilities into its cumulative impacts analysis. (Kunkel Remand Testimony at Exhibit 3). The DEQ's predicted impacts on ozone concentration for 16 plants scaled up to reflect the impacts from all 23 existing or proposed plants analyzed by Trinity, remain below the statistical error of the DEQ's model. (Tr. at 479-80). Ozone impact measured in this analysis is a small fraction of the worst-case background ozone concentration (4 v. 104 parts per billion). (Tr. at 477-78). Even using these worst-case values, the maximum, modeled ozone concentration remained below the NAAQS level of 120 parts per billion. (Tr. at 478).

Dr. Kunkel also testified that there were several conservative features built into the cumulative impacts analysis, which ensured that the analysis overstated the predicted impacts. For example: (1) the highest monitored pollutant concentrations from representative stations were used to estimate worst-case background air quality at all locations and at all times; (2) the model analyzed all 23 facilities, even though a much smaller number of projects will likely be built (Kunkel Remand Testimony at Exhibits 4 and 5); (3) the ISC model used conservatively overstates impacts from distant units; (4) the modeling assumed all 23 facilities were operating at their maximum rate, even though the actual permits will likely contain lower maximum allowable emission rates and actual emission rates are usually much less than potential rates; and (5) the models do not account for the emission reduction that will result from any of the regulatory programs for emissions reductions currently in place or that are being implemented. (Tr. at 481-483; Kunkel Remand Testimony at 15-17).

In sum, the analysis provides a reliable basis upon which the Commission can conclude that the air quality in Virginia will not be adversely affected by the Facility. (Tr. at 495-96).

Dr. Kunkel also discussed the various programs established by the Clean Air Act to control NO_x emissions and ozone formation. One such rule promulgated by the EPA requires revisions to the State Implementation Plans ("SIP") of eastern states to reduce NO_x emissions and establish a cap and trade program, referred to as the "NO_x SIP Call." Under the NO_x SIP Call, the EPA established a summertime cap on NO_x emissions, which is considerably lower than current emissions. Compliance is required by May 2004. The NO_x SIP Call will reduce NO_x emission by

over 100,000 tons per year from all Virginia sources, thereby reducing NO_x emissions as well as ozone (for which NO_x is a precursor) and visibility impacts related to ozone. Beginning in May 2004, under the NO_x SIP Call the DEQ will allocate 17,091 tons of NO_x per ozone season to all existing and new large electric generating units in Virginia. This 17,091 ton NO_x cap will apply no matter how many power plants are built. (Kunkel Remand Testimony at 17-19). Without the NO_x SIP Call, NO_x emissions from electric generators would have been 41,000 tons per summer ozone season in 2007. (*Id*. at 18). EPA and DEQ, through efforts like the NO_x SIP Call, are acting to reduce ozone levels in Virginia and across the Northeast. Dr. Kunkel believes clean burning plants like the Facility will help to ensure that this goal is met. (Tr. at 490).

On cross-examination, Dr. Kunkel discussed some of the particulars of the NO_x SIP Call, specifically the "new source" allowance set aside. Of the 17,000 emittable tons of NO_x per ozone season, only 855 tons have been reserved for utilization by generating units added on and after January 1, 1998. (Tr. at 547). Units in existence prior to that date will share 95% of the total allowances – 16,236 tons per season. (*Id*.). Existing sources may use, sell or withhold their allotted emission allowances. (Tr. at 549). Sources like the Facility, that commence operation after the 1998 deadline will be required to apply annually during the 2004-08 period for a pro rata portion of the 5% set-aside for new sources (the 855 tons). Regarding whether there would be sufficient NO_x allowances to permit significant generation construction in Virginia, Dr. Kunkel noted that allowance trading would theoretically occur over a 22 state region. (Tr. at 548).

Dr. Kunkel also testified Tenaska previously contacted personnel at the Forestry Department at UVA about the ozone modeling that Mr. Holmes mentioned in his testimony, but the Department was unwilling to provide any data from or details about this modeling. (Tr. at 494-95).

As to whether there will be a corresponding negative impact upon economic development in Fluvanna County and surrounding counties if there is a deterioration in air quality, Dr. Kunkel testified that because the additional modeling shows no significant deterioration of air quality and no exceedence of the NAAQS, there will be no adverse impact on economic development. (Tr. at 448).

Regarding the use of fuel oil as a alternative or backup fuel, Dr. Kunkel testified DEQ permitted the Facility to use 0.01% sulfur fuel oil for up to 720 hours per year, and only during the winter when natural gas supplies are at risk. Both the National Park Service and the National Forest Service applauded Tenaska's efforts to use this ultra low-sulfur fuel, and agreed it sets an important precedent. (Kunkel Rebuttal Testimony at 22-23; Exhibit 3, Appendix C).

Dr. Kunkel also addressed whether conditions are needed with respect to backup or alternative sources of water to be used at times of drought and low flow in the James River. He testified that he believed no such conditions were necessary. ECTI, the company that will provide water to the Facility, has obtained a permit from the DEQ to remove water from the James River, and went through an extensive permitting process to do so. That permit contains restrictions designed to protect the James River in the event of low-flow or drought situations. The reservoir will allow storage of water for use during low-flow periods. Tenaska's SUP from the Buckingham

County Board of Supervisors will ensure the reservoir is compatible with other local uses.[8] (Tr. at 401; *Id*. at 23).

Dr. Kunkel testified that ECTI has considered the cumulative impacts of its withdrawals on the James River. ECTI's maximum withdrawal of 28.1 cubic feet per second is approximately 0.45% of the average flow of the James at the intake location. This small percentage is not significant relative to average river flow. ECTI's withdrawal will be subject to maintaining minimum instream flows on a seasonal basis when flow in the James River declines. (*Id*. at 26).

Dr. Kunkel stated that the conservation measures are triggered by flow levels designed to maintain necessary flows in the Falls of the James area consistent with the James River Regional Flow Management Plan for the Falls of the James Area (1996). (*Id*. at 24-25). With his testimony Dr. Kunkel submitted a Drought Analysis and Contingency Plan developed by Tenaska that includes operational controls to reduce water use by the Facility. (Exhibit GK-5, Attachment GK-R-3). In issuing the Virginia Water Protection ("VWP") permit, the State Water Control Board ("SWCB"), relied on ECTI's and DEQ's analysis of minimum flows necessary to protect beneficial uses in the River. DEQ determined that ECTI's water withdrawal, if conducted in accordance with the permit, will protect instream beneficial uses and will not violate applicable water quality standards. The permit incorporates minimum instream flow requirements restricting or preventing withdrawal of water during certain low-flow periods, and also includes conservation measures that will be triggered by instream flow levels, which include an absolute restriction to zero withdrawal during certain low-flow periods. In its VWP permit Fact Sheet dated December 21, 2001, DEQ indicates that the impacts of the Facility on the existing stream beneficial uses are expected to be minimal, on both an individual and cumulative basis for the portion of the James between the Scottsville intake and Boshers Dam in Henrico County where the Falls of the James diversions begin to occur. (Kunkel Remand Testimony at Exhibit 11, pg. 5).

Dr. Kunkel further testified that the reservoir has been carefully designed to comply with Army Corps of Engineers' regulations regarding construction work in streams and wetlands. The reservoir will impact only 0.37 acres of wetlands, and all impacted wetlands will be replaced at a 2:1 ratio. (Tr. at 450-451). The Joint Permit Application submitted to the Virginia Marine Resources Commission, DEQ and the Army Corps of Engineers on October 10, 2001, documents compliance with the Army Corps of Engineers' regulations. (Kunkel Remand Testimony at 25-26; Exhibit 10). The reservoir will be sized to ensure that there is sufficient water during periods of conservation when ECTI must either reduce or cease withdrawal from the James River. It will be approximately 16 acres in area and is designed to impound approximately 650 acre-feet of water. Tenaska has completed an analysis of drought recurrence and duration in the James River as it will pertain to ECTI's withdrawals, and used the 150-year drought-of-record as the basis to determine the maximum volume of water storage needed by a generating station during any year. This results in a conservative estimate of the volume of water storage needed in the reservoir, and thus the storage volumes will be more than adequate to cover the generating station's needs during a repeat of the 100-year drought. Because the reservoir will be relatively small and subject to significant variations in level and because the preliminary design calls for the use of an impervious plastic liner to prevent seepage, it will not be appropriate for recreational use. Tenaska will not encourage the reservoir's use as a wildlife habitat, as the water level in the reservoir may fluctuate significantly

[8]Buckingham County Board of Supervisors issued the SUP for the reservoir on March 11, 2002.

and may be emptied on occasion; however, it will not discourage wildlife use. (Kunkel Remand Testimony at 27-29).

Dr. Kunkel also addressed the adequacy of Tenaska's emergency management plan, and whether Fluvanna County's emergency response personnel will be able to respond appropriately to an actual emergency at the Facility. The Facility will conduct annual one-day on-site training sessions to enable local fire fighters to become familiar with the plant layout and location of fire hydrants and other equipment. Tenaska will work with Fluvanna County emergency response personnel when designing the emergency systems, to ensure they are compatible with the County's equipment. The design of the fire protection system will take into account the estimated response time and capability of the local fire department. The Facility will also have on-site fire fighting equipment including on-site water storage. Tenaska will develop an Integrated Contingency Plan ("ICP") for the Facility incorporating all federal and state safety requirements. The ICP is a comprehensive manual detailing emergency planning and response actions and notifications, and it defines working relationships with response organizations. (*Id*. at 30-31). Dr. Kunkel included as an exhibit to his testimony, an ICP from another Tenaska facility, and stated that the ICP for the Facility would be similar. The ICP details, for example, regulatory requirements for emergency planning and response plans; facility location and contact information; required safety precautions; spill containment and clean-up procedures; evaluation of potential chemical release scenarios; and logistical support. (Kunkel Remand Testimony at Exhibit 12).

To prevent emergencies at the Facility, Tenaska will require that the fire protection system be designed in accordance with National Fire Protection Association 850, Recommended Practice for Fire Protection for Electric Generating Plants. The system's design will be reviewed with the local fire department to ensure conformance with applicable codes and standards and to ensure compatibility with the department's fire fighting equipment. The fire protection for Tenaska facilities typically includes, for example: 200,000 gallons of reserve water supply for fire fighting; sprinkler or deluge systems for various portions of the plant; carbon dioxide fire protection system to protect the combustion turbine generators; and fire and smoke detection systems throughout the plant. Tenaska's insurance broker also reviews the fire protection system drawings and will visit the Facility annually post-construction to ensure fire-fighting equipment is in good condition. (*Id*. at 32-33). Tenaska will also provide chemical spill prevention equipment. A water curtain spray system will remove ammonia vapors from the air in the event an ammonia leak is detected by area sensors, and the valves automatically will be closed. Facility operators can also stop hazardous material leaks from their secure control room by closing automated valves. (*Id*. at 33-34).

In order to work with local emergency response organizations, Tenaska has contacted the local emergency planning committee, fire chief, and sheriff, who provided Tenaska with a description of the County's current emergency response procedures. If there is a hazardous materials emergency at the Facility, the fire department will rely on information supplied by the Facility on chemical material safety data sheets. The chemical information is used to determine appropriate response actions. Fire engines will contain copies of Facility site plans and fire response equipment drawings. The Fluvanna County emergency committee has developed a county-wide emergency operations plan, including a plan for hazardous materials response. Dr. Kunkel also provided information on the Fluvanna County Fire Department, which maintains a hazardous materials ("hazmat") trailer with response equipment and provides both fire fighting and

hazmat response. Fluvanna County fire fighters all receive training, including hazmat training and 160 hours of initial fire fighting, monthly 2-3 hour training classes, and an annual 6 hour refresher course. Most Fluvanna County fire fighters have received an additional 32 training hours. (*Id*. at 35-36).

The Fluvanna County Fire Department inspects industrial facilities prior to startup to review plant structures and equipment, and the design and location of fire protection systems and hazmat storage locations. The department has 25 five-gallon buckets of aqueous fire-fighting foam ("AFFF") for fire suppression, and Tenaska will maintain an additional 25 five-gallon buckets of AFFF at the fire station and another 25 buckets of AFFF at the Facility. The fire department currently has one thermal imaging camera used to detect the source of a fire, and Tenaska will provide an additional three such cameras. (*Id*. at 37-38). Finally, as noted above, Tenaska committed to conduct annual training exercises with local fire fighters and emergency personnel. (Tr. at 320).

Testimony and Evidence of the Staff

The Staff presented the prefiled direct testimony of Mr. Howard M. Spinner, senior utilities analyst in the Division of Energy Regulation.[9] Mr. Spinner's testimony addressed the issue of whether the Facility will have an impact on the availability of service or rates charged by regulated public utilities providing natural gas or natural gas transportation service to Virginia customers, and provided feedback from the DEQ regarding the cumulative impacts analysis submitted by Tenaska. Mr. Spinner notes that Tenaska submitted testimony and exhibits pertaining to all of the remand issues identified in the Hearing Examiner's January 24, 2002, Ruling. However, aside from the two issues discussed above, the remand issues are beyond Staff's expertise and thus the Staff is silent on those issues. The Staff notes that Tenaska's submittal appears to be responsive to all the remanded issues and is a useful augmentation of the record. (Spinner Remand Testimony at 2-3).

Mr. Spinner first addresses Tenaska's fuel supply arrangements, and states that the Facility will be fueled by natural gas delivered from Transco's main line which runs through the Facility site. Tenaska will execute an interconnection agreement with Transco, providing for Transco to tap two of its main lines. Although Tenaska has entered into a tolling arrangement, it has not identified the tolling party. Thus, the record evidence will not include information regarding the natural gas supply or transportation arrangement for the Facility, other than that the Facility will receive natural gas through Transco's system. (*Id.* at 8-9).

As to the expected impact of the Facility on the availability of service or rates paid for natural gas, Mr. Spinner states that this is a difficult question to answer. He notes that Tenaska appears to take the position that the Facility and other proposed gas-fired projects in Virginia can be accommodated with virtually no impact on supply or transportation. Mr. Spinner states that although the Staff is less concerned with the impact of the Facility on gas prices, transportation price and availability is a different matter. He questions what would happen if the transportation system is not expanded, as envisioned by Tenaska. He also notes that the number and characteristics of new gas-fired generating plants to be built in Virginia are not clear. Mr. Spinner states that because Tenaska wants to use oil backup during the winter, it may be reasonable to

[9]Mr. Spinner's Remand Testimony was marked Exhibit 17 (hereafter "Spinner Remand Testimony").

assume that Tenaska's power purchaser will employ non-firm natural gas transportation services. (*Id*. at 9-10).

Mr. Spinner states that there are currently nine other proposed facilities that expect to be served off the Transco system. Staff estimates roughly that those nine plants plus the Facility, will have a cumulative maximum daily take, assuming all the proposed plants are built and all operate at maximum output, of around 1.7 Bcf/d. Mr. Spinner points to the testimony of witness Ellsworth, who stated that the entire Transco system has an average annual throughput of 5.8 Bcf/d, operating at 83% of capacity. (*Id*. at 10-11).

Mr. Spinner notes that while fuel supply arrangements may call into question the ability of the gas infrastructure to produce and deliver sufficient fuel to new and existing customers, he also indicates that market participants must be allowed to develop projects like the Facility, in order for Virginia to move towards a competitive power market. Although there may be adverse impacts on the availability of service or rates charged by gas utilities, particularly for interruptible transportation customers served by local distribution companies connected to Transco, it is extremely difficult to forecast those impacts due to the enormous uncertainty regarding expected demand for and supply of natural gas and transportation service. Further, Mr. Spinner testified that it is Staff's position the Facility will benefit the "development of effective competition in Virginia," and that the "likely benefits of moving to a competitive market for electric service, when considered in conjunction with the known economic and fiscal benefits to Fluvanna County, will outweigh any adverse impacts that may be associated with the operation of the project." (Tr. at 588-589).

As to the air quality cumulative impact analysis presented by Tenaska, attached to Mr. Spinner's testimony is a letter setting forth DEQ's comments on the analysis. (Spinner Remand Testimony at Attachment HMS-1). In that letter DEQ states that the results of the analysis show that there would be only minimal increases in air quality levels of SO_2, NO_x, CO, PM and ozone, and that predicted concentrations are well below the health-based standards. DEQ states that Tenaska's approach to the modeling is reasonable. Also attached to Mr. Spinner's testimony is an ozone analysis completed by DEQ, assessing the impacts of 16 existing or proposed electric generation plants on overall ground level ozone concentrations in Virginia. (Spinner Remand Testimony at Attachments HMS-2 and HMS-3). DEQ notes that because there is no EPA-approved methodology for predicting ozone concentrations, its ozone analysis is preliminary and will require more work and refinements. The ozone analysis included at least two facilities that have subsequently been cancelled. (Spinner Remand Testimony at Attachment HMS-1).

In sum, Mr. Spinner states that Tenaska has responded to the Hearing Examiner's January 24, 2002, Ruling requesting additional information. Due to changing conditions in capital and power markets, proposed projects are often canceled or delayed. If the public policy behind the Virginia Electric Utility Restructuring Act (that market-based supply and demand will produce a more efficient allocation of resources than the regulated regime) is to become a reality, projects such as the Facility must be allowed to compete and succeed so long as the public interest is adequately protected. Successful implementation of electric restructuring requires that new supply be built. Thus, the Staff continues to recommend that Tenaska's request for a CPCN be granted, conditioned upon Tenaska satisfying all applicable remaining environmental requirements. (*Id*. at 13-14).

DISCUSSION

In its remand, the Commission directed Tenaska to provide additional evidence on the areas set forth in its Remand Order. The issue here, then, is whether Tenaska has satisfied the Commission's directive so that the Commission has sufficient evidence to decide the merits of Tenaska's Application. The resolution of this case is fact driven. There is little or no evidence contrary to Tenaska's position in the case, and there are no legal issues in dispute. The short answer is Tenaska has met its evidentiary burden of proving the Facility, and its associated facilities: "(i) will have no material adverse effect upon the rates paid by customers of any regulated public utility in the Commonwealth; (ii) will have no material adverse effect upon reliability of electric service provided by any such regulated public utility; and (iii) are not otherwise contrary to the public interest." Section 56-265.2 B of the Code of Virginia.

Rates

Mr. Ellsworth addressed the proposed Facility's impact on natural gas rates and Dr. Kunkel addressed water and sewer rates. Mr. Spinner provided the Staff's position on the Facility's natural gas supply and transportation, but did not address the Facility's impact on water and sewer rates.

As summarized above, Mr. Ellsworth's testimony primarily addressed three areas: (1) the availability and reliability of natural gas pipeline transportation capacity in Virginia considering the projected natural gas consumption of new power plants; (2) the availability of natural gas on a regional and national level; and (3) the effect of the proposed Facility, and other proposed facilities, on the price of natural gas to other natural gas consumers in Virginia. (Ellsworth Direct Remand Testimony at 3-4).

In looking at gas transmission capability and future demand for natural gas, Mr. Ellsworth found the Southeast had one of the smallest gas-fired power generation loads. In 1999, natural gas accounted for only 3.7% of the fuel used by electric utilities. His firm predicts that demand for natural gas for electric generation facilities will increase from a daily average of 1.2 Bcf/d in 2000, to 2.3 Bcf/d in 2005, and 3.1 Bcf/d by 2010. Over the same period, his firm expects a slow but steady increase in demand for natural gas by residential, commercial, and industrial customers from 3.7 Bcf/d in 2000, to 4.1 Bcf/d in 2005, and 4.5 Bcf/d in 2010. Operating at maximum capacity, the Facility is expected to consume up to 170 MMcf/d of natural gas. The Transco pipelines located near the Facility provide approximately 2.5 Bcf/d capacity. (Ellsworth Direct Remand Testimony at 7, 12-14).

Mr. Ellsworth found that the Southeast, and Virginia, had abundant transmission pipeline capacity. Total pipeline capacity entering Virginia amounts to approximately 5.6 Bcf/d, compared to Virginia peak consumption of approximately 1.2 Bcf/d. As the demand for natural gas grows in the Southeast, Mr. Ellsworth expects, based on announced system expansions, that 2.5 Bcf/d in incremental system capacity will be added by 2005, and 3.0 to 4.0 Bcf/d by 2010. He noted that proposed upgrades to the Transco pipeline alone would add close to 1.0 Bcf/d of capacity between Louisiana and Virginia by 2004. Mr. Ellsworth believes additional consumption growth in the Northeast will not affect capacity utilization of the gas transmission lines transiting through the Southeast and Virginia. He cited a number of other gas transmission lines that could deliver gas to

the Northeast, including the reactivation of the Cove Point LNG terminal which could inject up to 750 MMcf/d of natural gas into the Transco system downstream of Virginia. (Ellsworth Direct Remand Testimony at 14-16; Tr. at 435).

In studying natural gas supplies, Mr. Ellsworth found there are abundant supplies to meet long-term demand growth. The estimates for the United States alone amounted to 740 Tcf in the lower 48 states, 194 Tcf in Alaska, and 155 Tcf in coalbed methane. Since the Facility would be contracting for available capacity on existing lines or paying for necessary upgrades to provide for firm service, Mr. Ellsworth found the Facility would have no impact on the reliability of natural gas supplies in Virginia. (Ellsworth Direct Remand Testimony at 17-19).

Likewise, with respect to natural gas prices, Mr. Ellsworth expects the Facility to have no impact on natural gas prices in Virginia. There are two components that comprise the citygate prices in Virginia: (1) commodity price and (2) transportation basis. Mr. Ellsworth believes the amount of gas consumed by the Facility is insufficient to materially impact national natural gas prices as measured at the Henry Hub. Additionally, he believes with gas-fired generation representing only 20% of the entire 5.2 Bcf/d gas market in the Southeast, it is unlikely the Facility will affect the delivered basis in Virginia. In his opinion, the procurement practices of those managing the fuel requirements for the retail market will have the greatest impact on retail natural gas prices. (Ellsworth Direct Remand Testimony at 19-20).

The Staff questioned Mr. Ellsworth's testimony concerning the Facility's impact on transportation price and availability, especially as it related to future pipeline capacity expansion projects. (Spinner Remand Testimony at 9-12). In his rebuttal testimony, Mr. Ellsworth explained that most of the Transco projects are currently under construction and are due to be in service by the 2004 operational date of the Facility. He explained that Transco has held "open seasons" for pipeline capacity in Virginia, in effect, subscribing the additional pipeline capacity before the additional capacity was built. In addition, he cited numerous other pipeline expansion projects that are planned or under construction that would provide an additional 7.5 Bcf/d in capacity to the Southeast by 2004. Although he agreed not all the announced projects may be built, system expansions by firms other than Transco would provide competitive options for existing Transco shippers, which could impact the availability of capacity along the Transco pipeline. (Ellsworth Remand Rebuttal Testimony at 1-3).

Dr. Kunkel confirmed there are no public water supply utilities within Fluvanna or Buckingham Counties that withdraw water from the James River. Accordingly, he concluded the proposed Facility would have no adverse effect on the rates charged by any water utility. Dr. Kunkel further confirmed ECTI has entered into a contract to supply Buckingham County with raw water for its water system, and received inquiries from the Fork Union Sanitary District for potential raw water supply. Since Tenaska is covering the cost of building the water supply facilities to serve its needs, Dr. Kunkel believes ECTI's other customers will be able to procure raw water at a fraction of the cost they otherwise would have had to pay to build their own water supply facilities. Finally, Dr. Kunkel confirmed there is no sewer service associated with the Facility. Consequently, the Facility would have no impact on any sewer utility operating in Fluvanna County. (Kunkel Remand Testimony at 4-6).

Based on Mr. Ellsworth's testimony, which was not rebutted, there appear to be sufficient supplies of natural gas and sufficient transmission pipeline capacity so that the Facility will have no material adverse effect on the rates paid by Virginia consumers for natural gas service. Additionally, Dr. Kunkel's testimony further established that Tenaska's proposed Facility will have no material adverse effect on the rates paid by Virginia consumers for water or sewer service. Accordingly, I find the proposed Facility will have no material adverse effect on the rates paid by Virginia consumers for natural gas, water, or sewer service.

Environment

As can be seen from Dr. Kunkel's remand testimony and accompanying exhibits, the ambient air quality in Fluvanna and surrounding counties is good, and is in attainment with all the NAAQS. The concentrations of NO_x, SO_2, PM, and CO, as well as ozone are well below the NAAQS. The DEQ monitoring stations closest to the Facility have not recorded any violations of any NAAQS over the last five years. For me, the bar graphs, Figures 1-1 through 1-9, included in Exhibit 3 of Dr. Kunkel's Remand Testimony were the most compelling evidence in this case. In one simple and understandable format, these graphs vividly show that the Facility, and 22 other existing and proposed electric generating facilities, will have an insignificant impact on the air quality in Fluvanna County and surrounding counties. In its cumulative impacts analysis, Tenaska used the worst-case assumptions for maximum emissions rates, hours of operation, use of backup fuel oil, background concentrations of air pollutants, and meteorology. Using actual topographic data, and completely ignoring required pollution reductions from current regulatory programs, such as the NO_x SIP Call and Acid Rain Program, the incremental impact of the Facility added to the impacts of 22 other existing and proposed facilities, represents an insignificant fractional increase above current levels of pollutants found in the air in Fluvanna County and surrounding counties. (Kunkel Remand Testimony at 6-7, Exhibit 3; Tr. at 457).

Tenaska, with the assistance of DEQ and the Staff, developed a cumulative impacts modeling methodology. Because of the assumptions used in the model, the results would greatly overstate potential future ground level pollutant concentrations from existing and proposed sources. In developing the model, Tenaska selected the highest observed concentrations of criteria pollutants, and selected the most conservative modeling methodology. As discussed in Dr. Kunkel's testimony, the model: (1) used the highest monitored concentrations of NO_x, SO_2, PM, and CO from representative stations to estimate the worst-case background air quality at all locations and at all times; (2) analyzed all 23 existing or proposed electric generating facilities, although not all of the facilities may be built; (3) selected the ISC model which is known to overstate the impacts from distant emissions sources; (4) assumed all 23 facilities were operating at their maximum rates, even though their operating permits may contain lower emission rates and their actual emission rates are more likely to be less than their permitted rate; and (5) excluded the emissions reductions that may occur from existing regulatory programs or programs that are in the process of being implemented. These conservative assumptions were built into the model to ensure that it overstated the predicted cumulative impacts on air quality.[10] The model is so conservative that the predicted outcomes would most likely never occur in the environment. The DEQ and the Staff both agreed Tenaska's cumulative impacts analysis was a reasonable approach to respond to

[10]Based on recent announcements, at least two of the facilities included in Tenaska's cumulative impacts analysis will not be built, thus further overstating the results of the analysis.

the questions raised in the Commission's Remand Order. I, likewise, find the cumulative impacts analysis Tenaska employed in this case to be reasonable. (Kunkel Remand Testimony at 15-17; Tr. at 481-83).

Taking into consideration the conservative nature of Tenaska's cumulative impacts analysis, the results of the analysis show that the combined impacts of all 23 existing or proposed facilities are below the allowable PSD increments in all cases. The results also show that in most cases the combined impacts of all of the facilities are below the significance trigger set by the EPA for a single facility. Adding the predicted impacts of all 23 facilities to the worst-case existing background air quality, the evidence shows that the Facility will not materially degrade existing air quality in Fluvanna County and surrounding counties, and will not cause a violation of any NAAQS. (Kunkel Remand Testimony at Exhibit 3, Figures 1-1 through 1-9).

As set forth above, I find Tenaska's cumulative impacts analysis adequately demonstrates that the Facility's emissions will have an insignificant impact on air quality in Fluvanna County and surrounding counties. I further find Tenaska's cumulative impacts analysis adequately demonstrates that the Facility's emissions, when combined with the emissions from 22 other existing or proposed facilities, will have no material adverse effect on air quality in Fluvanna County and surrounding counties.

Economic Development

Because Tenaska's cumulative impacts analysis shows no significant deterioration of air quality and no exceedence of the NAAQS, I find the Facility's emissions will have no material adverse effect on economic development in Fluvanna County and surrounding counties. After the Facility is built, the air quality in the area would be virtually indiscernible from the air quality that exists today. No business or industry seeking to locate in the area would be prohibited, or even dissuaded from doing so, on the basis of air quality alone. The fractional increase in the overall level of pollutants in the air-shed caused by the Facility and 22 other existing or proposed facilities, is so small that the Facility's emissions should have no impact on economic development anywhere in Virginia.[11] Tenaska's cumulative impacts analysis shows that a potential violation of the NAAQS for any of the criteria pollutants or ozone is not even a close call.

The Public Interest

(a) Fuel Oil Use.

My Initial Report considered comments of public witnesses on the proposed Facility's use of fuel oil as an alternative or backup fuel. The public witnesses expressed their concern with the ability of the County's roads to safely handle the increased truck traffic needed to resupply the Facility with fuel oil, and the Facility's air emissions in general. I found the use of fuel oil was the common link between these two issues. The most logical solution to satisfy the public witnesses' concerns was to recommend the Facility be denied authority to use fuel oil as a backup fuel. This

[11] Although not directly addressed in this proceeding, for those areas of Virginia that are already in non-attainment, the insignificant fractional increase in the overall level of pollutants caused by the 23 existing or proposed facilities should not add materially to their existing air pollution problems.

eliminated the traffic problem and, as an added benefit, reduced the Facility's potential emissions of NO_x, SO_2, PM, and Sulfuric Acid Mist. However, requiring the Facility to operate solely on natural gas would correspondingly increase its emissions of CO and VOCs.

In my Initial Report, I found Tenaska failed to articulate well its need to use fuel oil as an alternative or backup fuel. Tenaska argued it needed the ability to burn fuel oil to be competitive, and it needed a backup fuel oil capability in case of an emergency. In the remand case, Tenaska focused its testimony and evidence on the need for a backup fuel oil capability to meet reliability needs. I find this argument to be persuasive. As a society, what do we expect when we turn on a light switch? We expect the lights to come on 100% of the time, not 50%, 75%, or even 99%. For the electric industry, the standard is 100% reliability, or the system has failed. There are two components to reliability: transmission reliability and generation reliability. Tenaska focused on the need for generation reliability.

Mr. Ellsworth's testimony addressed the need for a backup fuel capability to enhance generation reliability in case of a *force majeure* interruption of gas supplies. He argued that a backup fuel capability adds an extra amount of security that the Facility will dispatch when required, adds reliability to the electric power grid, ensures competitive pricing between fuels, and provides for greater fuel diversity in electric generation. Mr. Ellsworth found that 86% of the gas-fired power plants in the Southeast had a backup fuel capability. There are 11 gas-fired plants in Virginia, representing 92% of the 4,320 MW of statewide gas-fired generation, with a backup fuel capability approved by the Commission.[12] If all the gas-fired power plants proposed for Virginia are factored into the analysis, the overall percentage of plants with a backup generation capability falls to 61 percent. This would leave 39% of the state's gas-fired generation subject to shutdown because natural gas is either uneconomical to use as a fuel, or is simply unavailable. Mr. Ellsworth believes the ability to burn fuel oil will increase the overall reliability of electric generation in Virginia. (Ellsworth Direct Remand Testimony at 8, 10).

Mr. Ellsworth also noted the ability to switch from natural gas to fuel oil could benefit other natural gas customers in two ways. First, if gas supplies were scarce, the ability to switch to fuel oil could free-up additional pipeline capacity for other residential and industrial gas customers. Secondly, it could shave peak natural gas demand, reducing upward pressure on gas prices and leading to reduced prices for other natural gas customers. (*Id*. at 10-11).

Mr. Ellsworth was able to quantify the Facility's expected usage of fuel oil based on the historic usage of other gas-fired plants with a backup fuel capability. (*Id*. at 12). In Exhibit CLE-6 of his Direct Remand Testimony, he looked at the fuel oil use of 10 power plants. In reviewing his analysis, I believe he should have excluded the peaker plants. Including the peaker plants tends to understate the average annual fuel oil consumption of an intermediate/base load plant, such as the Facility. Comparing the proposed Facility to other like facilities, produces an annual average fuel oil use of 4.35 million gallons over a five-year period, which equates to approximately 100 hours of

[12]For example, the Doswell Limited Partners facility has a six-month backup fuel oil capability. Although there was some discussion in this case about the "right" number of hours for backup fuel operation for the Facility, I do not believe this case is the appropriate forum to establish limitations or guidelines on backup fuel use. Such an issue should be addressed in a rulemaking proceeding where the public policy considerations of such limitations or guidelines can be examined in depth and vigorously debated by all interested parties.

fuel oil operation per year.[13] This, in turn, gives a clearer picture of the truck traffic and the air emissions that may likely be associated with the Facility's operations. Assuming the Facility started with a full tank of fuel oil (3.5 million gallons), it would require approximately 580 tanker trucks of fuel oil to replace that used in operations, an average of approximately four trucks per day during the period it may operate on fuel oil.

To address the issue of truck traffic at the Facility, Mr. Ownby stated Tenaska's customer has committed to a limitation of fuel oil deliveries of no more than four per hour and no more than 48 on a daily basis. Mr. Ownby believes that modifying the rate that fuel oil is delivered is an acceptable reliability risk that can be managed, but reducing the total number of hours the Facility is permitted to burn fuel oil is not. He compared the Facility's need for authorization of the entire 720 hours of fuel oil operation to having a complete spare tire in a car, rather than half a spare tire. Mr. Ownby noted that in some years the Facility would use fuel oil on an intermittent basis and in other years not at all. However, there may be a worst case year when natural gas supplies are critically needed elsewhere, and Tenaska's customer and the citizens of Virginia would benefit from the Facility's ability to continue generating electricity on ultra low-sulfur fuel oil.[14] (Ownby Remand Testimony at 8-11; Tr. at 404-06).

In weighing the proposed Facility's need for an alternative or backup fuel source to meet its reliability needs against the County residents' concerns over tanker truck traffic and air quality, I find that the balance tips in favor of allowing the Facility to burn 0.01% low-sulfur fuel oil as a backup fuel for no more than 720 hours during the period October through March.

In an effort to address its neighbors' concerns, Tenaska's customer has agreed to limit tanker truck traffic. This limitation adequately addresses my concern that the Facility could be inundated with tanker trucks during fuel oil operations. Mr. Ownby has committed that this will not occur. The additional record evidence demonstrates the tanker truck traffic will be significantly less than I initially believed. Additionally, the evidence further demonstrates the roads in the area, particularly Route 721, appear capable of handling this modest increase in truck traffic. Finally, Tenaska has committed to work with the VDOT and the County to address any potential traffic problems related to construction at the Facility, or fuel oil deliveries. Although the Facility's air quality permit allows up to 720 hours of fuel oil operation, the additional record evidence confirms that it is highly unlikely such operations would occur. On average, the Facility will be operating on fuel oil approximately 100 hours during a six-month period. There may be rare instances, however, during the Facility's lifetime where wild swings in the price or supply of natural gas would necessitate fuel oil operations for greater periods of time. Even during such times, the Facility's deliveries of fuel oil would be limited by the restrictions set forth above.

Considering the expected 100-hour annual operation on fuel oil, I am less concerned about the Facility's air emissions during such operations. In the initial case, I had to assume the 720-hour

[13]Although Tenaska previously asserted that its studies indicated that it would operate approximately 100 hours per year on fuel oil, this assertion could not be validated until the necessary data was included in Mr. Ellsworth's testimony.
[14]Mr. Ownby addressed an interesting point at the Remand Hearing relating to the Facility's output, namely, it is immaterial whether Tenaska's tolling partner has electric supply contracts with instate or out-of-state customers. The fundamental laws of physics apply to the electrons produced by the Tenaska Facility. When the electrons are placed into the electric power grid, the electrons would be used by the nearest load center, which in all probability would be in Virginia, irrespective of where the Facility's delivery customer is located. (Tr. at 411).

worst case scenario for fuel oil operations because there was no solid evidence that the Facility would, as it represented, operate on fuel oil for only about 100 hours per year. It now appears, however, the Facility's expected fuel oil use during an average year will amount to about one-seventh the worst case scenario. The Facility's air quality analysis, assuming the worst case scenario, initially indicated that the Facility's operation on fuel oil would have no measurable impact on the residents of Fluvanna County. The Facility's expected 100 hours of operation on fuel oil makes any impact even less likely.

Finally, Tenaska's argument that its ability to use an alternative fuel during periods of high natural gas prices or scarce supply may benefit other residential or commercial gas customers in Virginia, was not proposed in the initial case.

For the reasons addressed above, I find that the Facility's use of 0.01% low-sulfur fuel oil as a backup fuel for no more than 720 hours during the period October through March is not contrary to the public interest, will have no material adverse effect on traffic in the area surrounding the Facility, will have no material adverse effect on air quality in Fluvanna County and surrounding areas, and will promote the public interest by maintaining system reliability on the electric power grid during winter months when reliable electric service is most needed by citizens of this Commonwealth. Accordingly, I recommend the Commission impose no additional restrictions on the Facility's use of ultra low-sulfur fuel oil as a backup fuel.

(b) Backup Water Use & Reservoir.

DEQ issued ECTI a VWP Individual Permit on December 27, 2001. The permit authorizes ECTI to construct and operate a water intake on the James River and construct a raw water transmission pipeline to supply water to the proposed Facility. (Kunkel Remand Testimony at Exhibit 1).

The amount of water that may be withdrawn from the James River is based on various demand conditions set forth in the VWP permit. The amount that may be withdrawn is limited by cubic feet per second, and the annual withdrawal is limited in billion gallons per year. Under the highest demand condition, which includes Tenaska Fluvanna, Tenaska Buckingham, and other ECTI customers (Buckingham County and potentially the Fork Union Sanitary District) using up to 1.1 million gallons of water per day, the maximum pumping rate is 28cfs and the maximum annual withdrawal is 4.21 billion gallons (an average of 11,534,246 gallons per day). Five years after the issue date of the permit, if ECTI is not using all the water allowed under the permit for beneficial uses, then the maximum pumping rate and maximum annual withdrawal will be reduced in the VWP permit to reflect actual use. (*Id*. at Schedule A).

The VWP permit also addresses potential low-flow conditions in the James River. The permit establishes various triggers based on the time of year (November 1 to June 30, "Wet Season;" and July 1 to October 31, "Dry Season") and the flow rate of the river at the Scottsville, Virginia gauge. The allowable pumping rates are a function of the streamflow at Scottsville and the time of year. Based on various formulae in the permit, Tenaska would be allowed one of three options: (1) to either withdraw water at the maximum rate set forth in its permit, (2) reduce its withdrawals by 50%, or (3) discontinue its withdrawals entirely. The conservation measures are

tied to stream flow levels designed to maintain necessary flows in the Falls of the James area consistent with the James River Regional Flow Management Plan for the Falls of the James Area (1996), the same plan that the City of Richmond and Henrico County follow. (*Id.* at 25; Schedule B).

Dr. Kunkel explained that to support its VWP permit application, ECTI was required to examine existing stream flow data including historic low flow and average normal flows in the James River. ECTI was also required to provide an analysis of minimum flows necessary to protect beneficial uses of the river. Before issuing the VWP permit, the SWCB determined that ECTI's water withdrawal, if conducted in accordance with the conditions in its permit, will protect instream beneficial uses and will not violate applicable water quality standards. The SWCB also determined that the effect of ECTI's withdrawals, together with other existing and proposed withdrawals, will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. Dr. Kunkel explained that the impacts of all sources on stream flows are considered and regulated through the VWP program. At its maximum withdrawal rate of 28cfs, ECTI's withdrawals represent only 0.45% of the average flow of the James River (6,182cfs) at the location of its proposed intake structure. (*Id*. at 23-26).

Dr. Kunkel provided an additional explanation of the need for the reservoir. A Tenaska affiliate will construct the reservoir on a 420-acre tract of land in Buckingham County, adjoining the tract where the Tenaska Buckingham facility will be constructed. The reservoir will cover approximately 16 acres and will impound approximately 650 acre-feet of water.[15] This water will be used to supply water to both Tenaska facilities when ECTI's water withdraws from the James River are curtailed. Tenaska used the 150-year drought-of-record to determine the water volume of storage needed by a generating station during any year. Tenaska believes that this volume of water would be sufficient to supply both facilities during a repeat of the 100-year drought. The reservoir would be replenished by rainfall, and water withdrawals from the James River. The reservoir would impact 0.37 acres of wetlands, and those wetlands would be replaced at a 2:1 ratio. The Buckingham County Board of Supervisors has issued a SUP for the construction of the reservoir. The Tenaska affiliate constructing the reservoir has filed a Joint Permit Application with the DEQ, VMRC, and the Army Corps of Engineers for a construction permit. (*Id*. at 26-29).

Dr. Kunkel explained the reservoir would not be suitable for other purposes such as recreational fishing or wildlife habitat. The preliminary design of the reservoir uses an impervious liner to prevent water seepage into the soil. Tenaska believes that boating, fishing and other recreational uses may damage the liner. Additionally, the reservoir may have to be drained from time to time, so it would be impracticable to stock the reservoir with fish. Dr. Kunkel believes wildlife will end up using the reservoir, but because the reservoir may be emptied on occasion, Tenaska does not believe it would be appropriate to "encourage" its use as a wildlife habitat. Tenaska plans to dedicate the 400 acres surrounding the reservoir to conservation uses, with the exception of the land it needs to access the reservoir and its water-related facilities. (*Id*.)

I find Tenaska has established its need for water from a reservoir to be constructed by an affiliate in Buckingham County, and transported to Tenaska's Facility by ECTI. Although Tenaska's studies indicate that it is highly unlikely that it may need the water from the reservoir,

[15]To impound this volume of water, the reservoir would have to be approximately 40 feet in depth.

there are times when a 100-year drought or other low-flow conditions on the James River may occur with greater frequency than statistics can predict, so access to a backup water supply would be prudent planning. Without large volumes of water, the Tenaska Facility cannot operate. Tenaska has established that it needs this backup water supply to meets its reliability needs. The reservoir, and its associated facilities, would have a negligible impact on the environment. The 0.37 acres of wetlands impacted by the reservoir would be replaced at a 2:1 ratio. Since the reservoir would not be well suited for other recreational or wildlife purposes, additional mitigation of the environmental impact of the reservoir would not be necessary.

(c) Emergency Management Plan.

Tenaska supplemented the record with a copy of an Integrated Contingency Plan it developed for another of its facilities, as an example of what it would develop for the Facility. The plan covers such topics as: *Station Information*, which includes contact information for key employees; *Emergency Response*, which includes personnel roles and lines of authority; *Incident Response Operations*, which includes spill control procedures, containment, cleanup and decontamination; *Planning*, which includes risk assessment, sensitive area protection and coordination with local and state authorities; *Logistics*, which includes medical resources, communication, transportation, and on-site equipment and personnel; *Contract Services*, which includes a list of services and contact information; *Incident Follow-up*, which includes formal notification and emergency response critiques; *Training and Exercises*, which includes an annual emergency response and spill cleanup training program; *Plan Amendments*, which includes procedures for revising the plan and distributing the revisions; and *Spill Prevention*, which includes alarm systems, leak detection, containment systems, and inspections and testing. (Kunkel Remand Testimony at Exhibit 12).

Mr. Sammons addressed the areas in which Fluvanna County's emergency management personnel are coordinating with Tenaska in the development of the emergency response plan for the Facility. These areas include: annual on-site training; inspections and drills; use of safety-minded design of systems; use of compatible fittings; water storage for fire protection; outside-the-fence water connections; integrated emergency response; all needed personnel safety equipment; spill containment vessels; chemical release scenarios; logistical support arrangements; provision of all Facility plans and specs; routine third party safety inspections; and a direct ongoing relationship with the County's Local Emergency Planning Committee. Mr. Sammons is confident local emergency management personnel are up to the task of responding to an emergency at the Facility. (Ex. 10, at 8-9)

At the hearing, Tenaska committed that it would invite Fluvanna County emergency management personnel to participate in its annual training exercises. (Tr. at 320).

I find the Integrated Contingency Plan that Tenaska will develop for the Facility, and Fluvanna County's input into the development of that plan, adequately address the concerns raised by the public witnesses that local emergency management personnel are not up to the task of responding to an actual emergency at the Facility. Additionally, I find the Integrated Contingency Plan, and Tenaska's commitment to invite Fluvanna County emergency management personnel to its annual training exercises, satisfy my concerns regarding contacting Tenaska personnel in the

event of an emergency, and providing realistic training for the County's emergency management personnel. I recommend that the Commission impose no additional emergency contact procedures or training requirements in Tenaska's CPCN.

I commend Tenaska, its personnel, and its counsel for the manner in which they approached this case. At every turn, and in several cases in very short order, the Tenaska team was willing to supply the Commission the evidence and supporting data necessary for the Commission to undertake its statutory duty to independently review Tenaska's Application to construct the proposed Facility. If its conduct in this proceeding is any indication of its corporate culture, one can rest assured that Tenaska delivers what it promises. Tenaska has shown through its evidence that the Facility will have no material adverse effect on the environment, or the citizens of Fluvanna County, surrounding counties, or the Commonwealth. Tenaska's presence in Fluvanna County will be a positive economic benefit for the County and the Commonwealth. Without reservation, I recommend the Commission issue Tenaska a CPCN to construct and operate the Facility.

FINDINGS AND RECOMMENDATIONS

Based on the evidence received in this case, and for the reasons set forth above I find that:

(1) The proposed Facility will have no material adverse effect on the rates paid by Virginia consumers for natural gas, water or sewer service;

(2) The current level of air quality in Fluvanna County is good, and is in attainment of all NAAQS;

(3) Tenaska's cumulative impacts analysis employed in this case is reasonable, as it tends to greatly overstate potential ground level concentrations of NO_x, SO_2, PM, and CO from existing and proposed sources, and potential ground level concentrations of ozone;

(4) Tenaska's cumulative impacts analysis adequately demonstrates that the Facility's emissions will have an insignificant impact on air quality in Fluvanna County and surrounding counties;

(5) Tenaska's cumulative impacts analysis adequately demonstrates that the Facility's emissions, when combined with the emissions from 22 other existing or proposed facilities, will have no material adverse effect on air quality in Fluvanna County and surrounding counties;

(6) Because the cumulative impacts analysis completed by Tenaska shows no significant deterioration of air quality and no exceedence of the NAAQS, the Facility's emissions will have no material adverse effect on economic development in Fluvanna County and surrounding counties;

(7) The Facility's use of 0.01% low-sulfur fuel oil as a backup fuel for no more than 720 hours during the period October through March is not contrary to the public interest, will have no material adverse effect on traffic in the area surrounding the Facility, will have no material adverse effect on air quality in Fluvanna County and surrounding areas, and will promote the public interest

by maintaining system reliability on the electric grid during winter months when reliable electric service is most needed. I recommend the Commission impose no additional restrictions on the Facility's use of ultra low-sulfur fuel oil as a backup fuel;

(8) Tenaska established its need for a backup water supply from a reservoir to be constructed by an affiliate in Buckingham County, and transported to Tenaska's Facility by ECTI. I further find that the reservoir, and its associated facilities, will have no material adverse effect on the environment; and

(9) The Integrated Contingency Plan that Tenaska, with the assistance of the County, will develop for the Facility adequately addresses: the concerns that the County's emergency management personnel were not up to the task of responding to an emergency at the Facility; procedures for contacting Tenaska personnel in the event of an actual emergency; and the provision of realistic training for the County's emergency management personnel. I recommend the Commission impose no additional emergency contact procedures or training requirements in Tenaska's CPCN.

I therefore ***RECOMMEND*** that the Commission enter an order that:

1. ***ADOPTS*** the findings contained in this Report;

2. ***GRANTS*** Tenaska interim approval pursuant to § 56-234.3 of the Code of Virginia, to make financial expenditures and undertake preliminary construction work on the Facility; and

3. ***GRANTS*** Tenaska approval pursuant to § 56-265.2 of the Code of Virginia to construct and operate the Facility.

COMMENTS

The parties are advised that any comments (Section 12.1-31 of the Code of Virginia and 5 VAC 5-20-120 C) to this Report must be filed with the Clerk of the Commission in writing, in an original and fifteen (15) copies, within seven (7) days from the date hereof.[16] The mailing address to which any such filing must be sent is Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of such document certifying that copies have been mailed or delivered to all counsel of record and any such party not represented by counsel.

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Michael D. Thomas
Hearing Examiner

[16]By agreement of counsel, the period for parties to file comments to this Report was set at seven (7) days.